

A BREAKAWAY SUPPORT POST FOR
HIGHWAY GUARDRAIL END TREATMENTS

946 717 ABSTRACT OF THE DISCLOSURE

A breakaway support post is provided for a highway guardrail system to enhance the safety of a vehicle impacting with either the rail face of the associated guardrail or one end of the guardrail facing oncoming traffic. For some applications, the breakaway support post may be formed from a steel I-beam with one or more elongated slots formed intermediate the ends of the steel I-beam. The slots are preferably formed in the flanges of the I-beam which are in turn aligned generally parallel with the associated guardrail. For other applications, a breakaway support post may have an upper and a lower portion with a rotatable coupling assembly disposed therebetween. A shear pin or other releasing mechanism is preferably provided to maintain the upper and lower portions generally aligned with each other prior to the impact of a vehicle with one end of the associated guardrail. The coupling assembly is preferably oriented relative to the guardrail such that the breakaway support post will provide sufficient support during a rail face impact to direct the impacting vehicle back onto the associated roadway. For still other applications, a breakaway support post may have an upper and a lower portion with a frangible connection disposed therebetween. The frangible connection is preferably oriented such that the breakaway support post will provide sufficient support during a rail face impact and release the upper portion from the lower position when a vehicle impacts one end of the associated guardrail.